

Pacific Arctic Zooplankton and DBO

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- **Zooplankton sampling in the region.**
- **DBO prelim results 2010 and 2011.**



**Fisheries and Oceans
Canada**

**Pêches et Océans
Canada**



**University
of Victoria**

Zooplankton sampling in region since 2000.

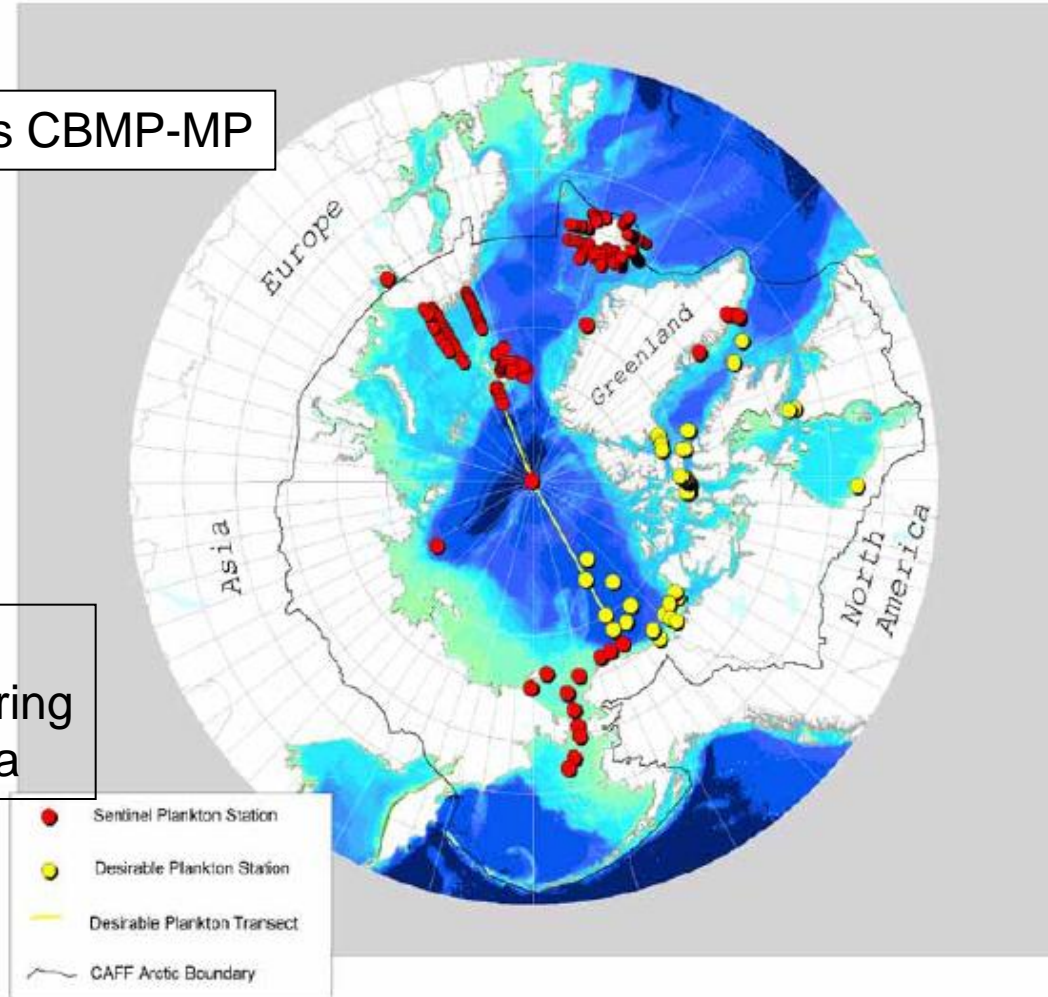


This data is available as context for DBO

Nuts and Bolts.

Gear brought into international consensus as per the Circumpolar Biodiversity Monitoring Program–Marine Plan. 100m tows with 236 μ m nets changed to 153 μ m nets.

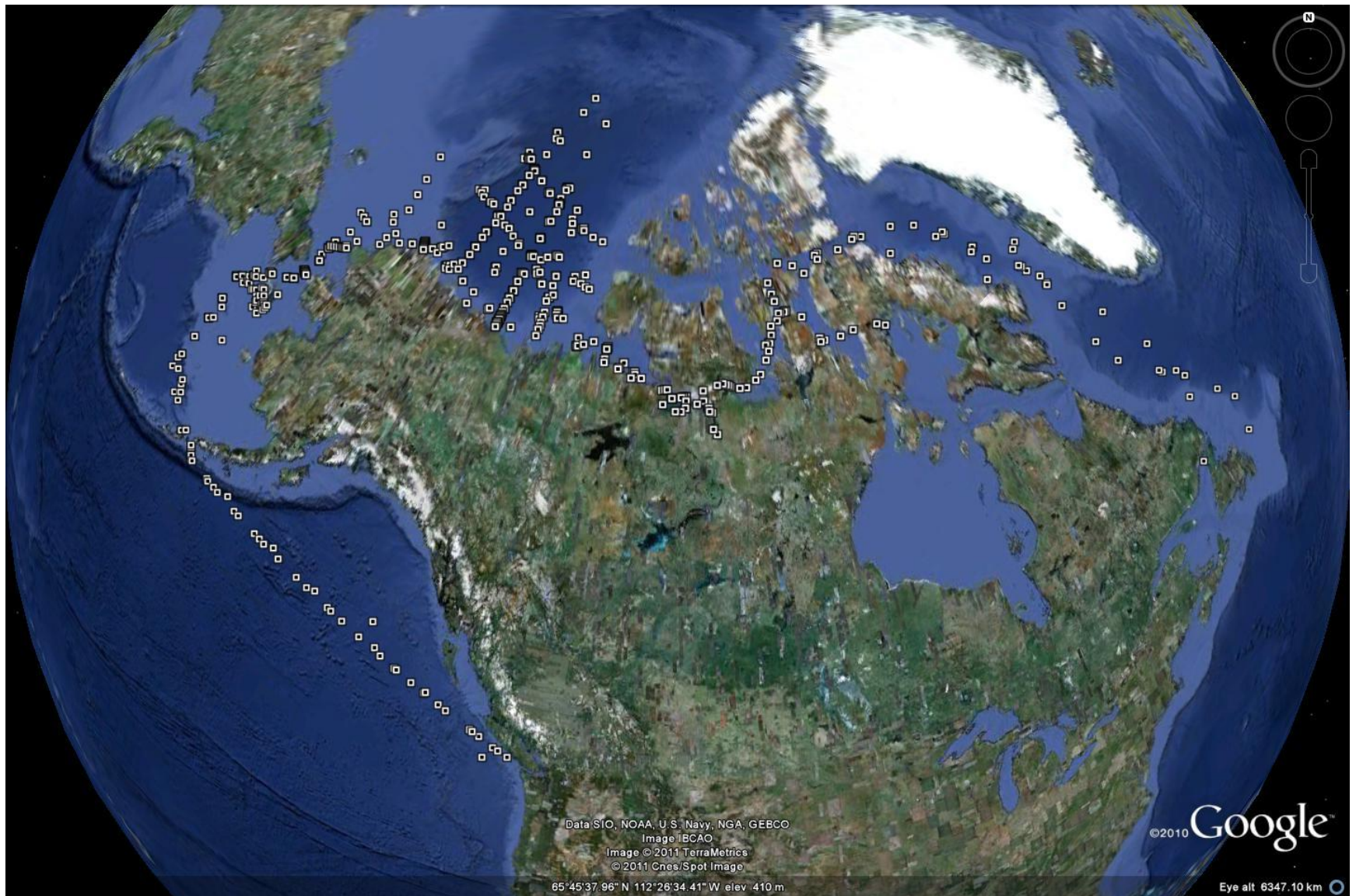
Plankton Stations CBMP-MP



JN developing short list of marine monitoring indicators for Canada

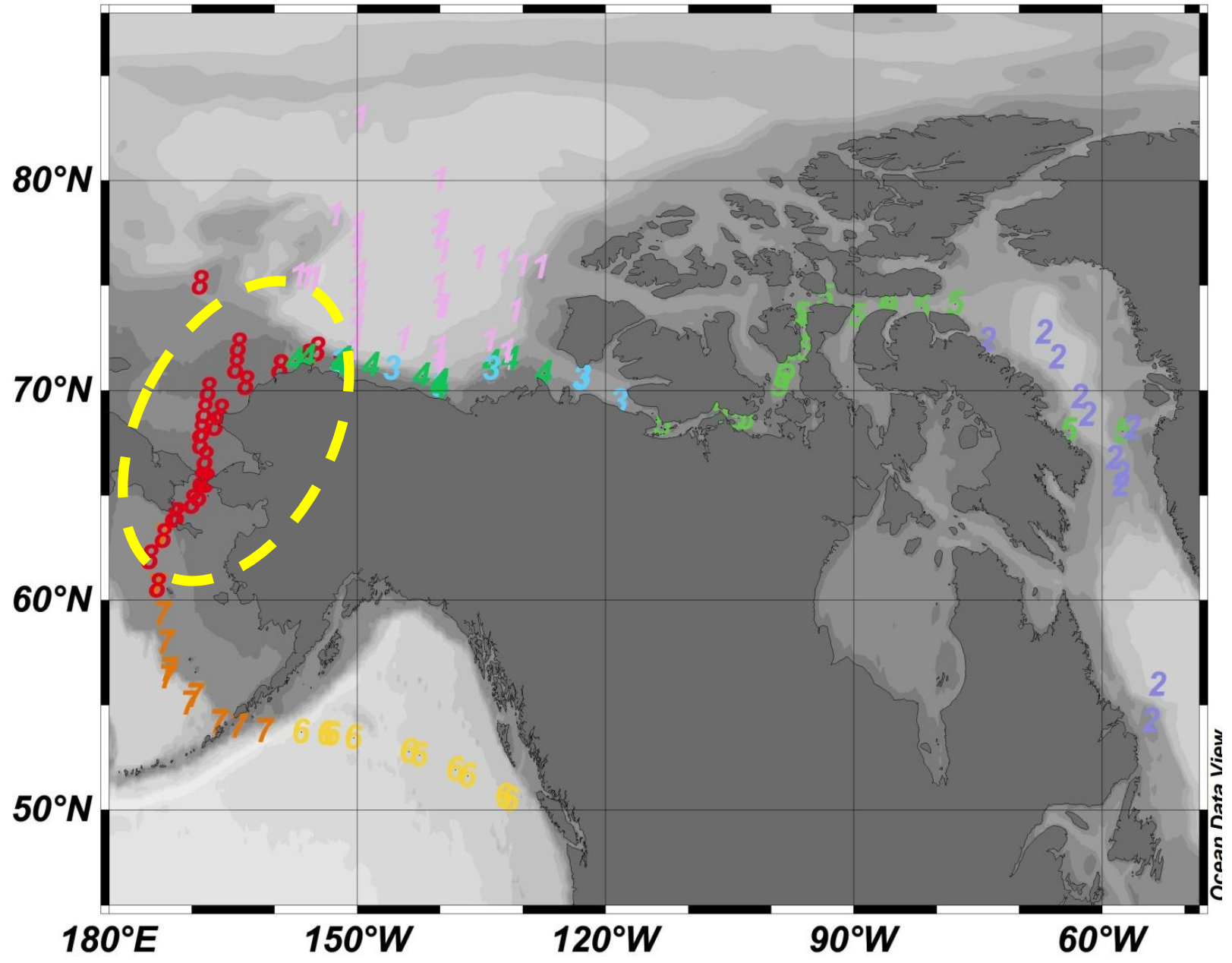
(From Circumpolar Biodiversity Monitoring Program–Marine Plan)

Zooplankton sampling in region since 2000.

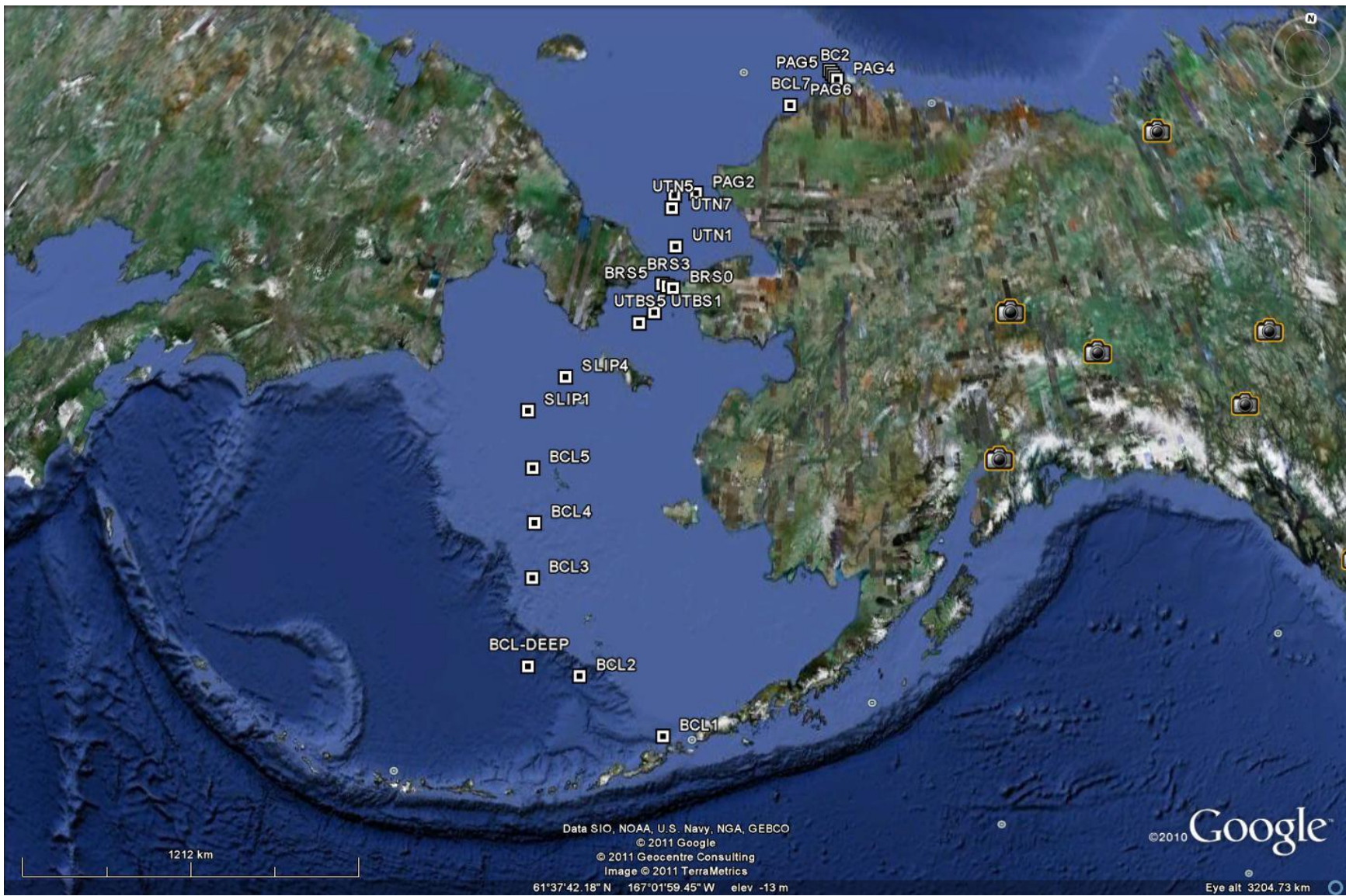


This data is available as context for DBO

Focus DBO - region



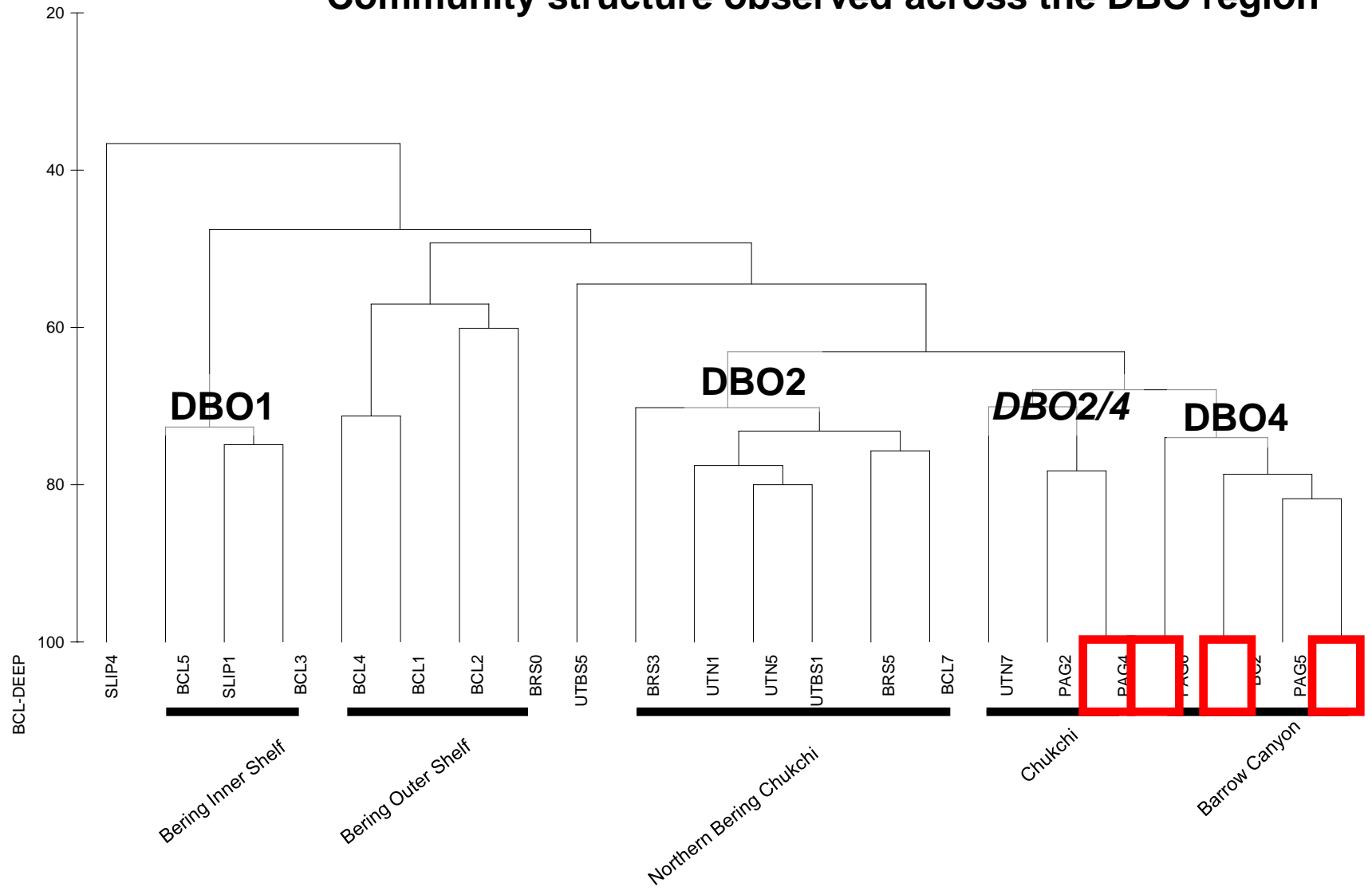
2010 Integrated Canada's Three Oceans and DBO Zooplankton Sampling



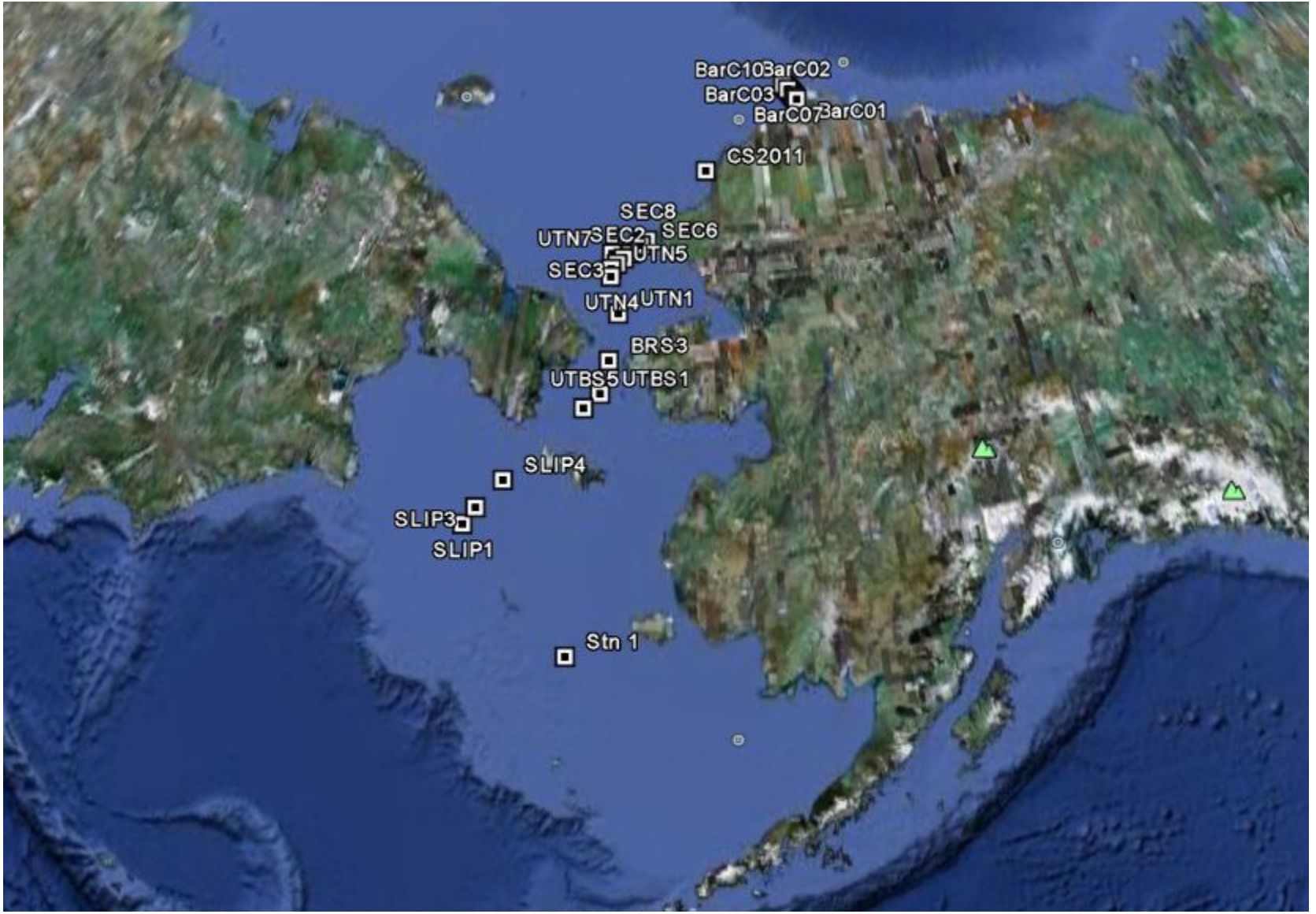
2010 Integrated C3O and DBO Zooplankton Analysis

– 4th root transformed Bray-Curtis similarity based on abundance

Community structure observed across the DBO region -



2011 Integrated C3O and DBO Zooplankton Analysis

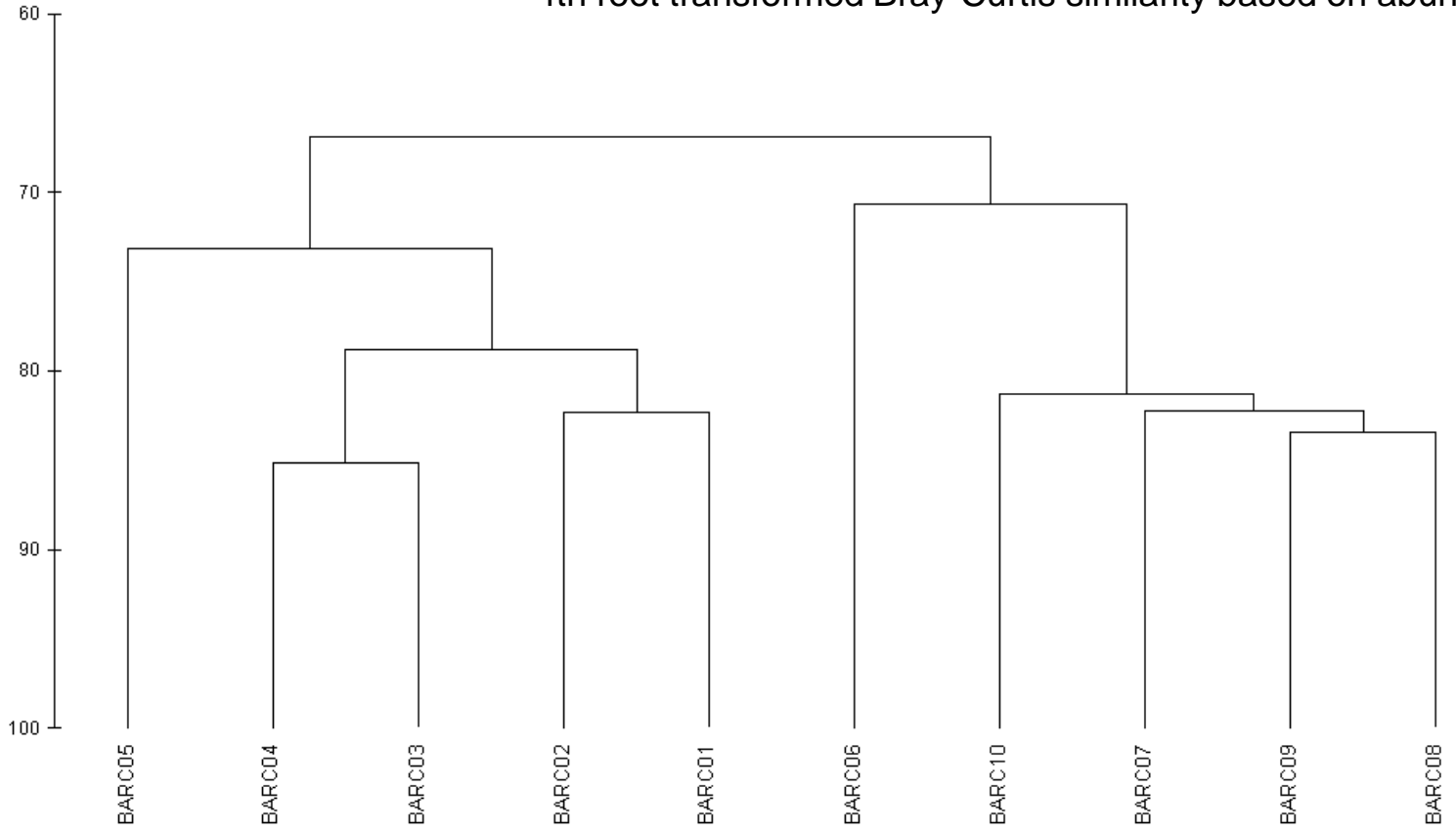


2011 Integrated C3O and DBO Zooplankton Sampling



2011 DBO- results

– 4th root transformed Bray-Curtis similarity based on abundance



Neocalanus

C. hyperboreus



2011 DBO- results



Summary

Biogeographic Structure definable and serves as an underpinning of DBO pelagic ecosystem structure.

Baseline biogeographic structure can be used to monitor both community composition changes and range shifts.

To do: Science

Assess change > abundance, biomass, community composition, etc.

Define how biogeographic structure corresponds to physics and geochemistry.

To do: Logistics

Develop data sharing and analysis protocols.

Agree on list of indicators-indices

Sampling (cruise) coordination.

Acknowledgments

DFO - NCAARE

NSF

NOAA

NSERC

Canadian Coast Guard